

Appl. No. 10/791,043
Response Dated August 4, 2005
Reply to Restriction Requirement dated July 8, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently Amended) An HVAC controller comprising:
two or more switches;
a movable member;
a first plurality of detents, wherein the first plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved.
2. (Currently Amended) The HVAC controller according to claim 1 further comprising:
a controller coupled to the two or more switches for changing an HVAC control parameter based on the sequence that the two or more switches are switched.
3. (Currently Amended) The HVAC controller according to claim 1, wherein the two or more switches include three or more switches.
4. (Original) The HVAC controller according to claim 1, wherein the movable member further includes a second plurality of detents configured to engage one or more detent engagement members to selectively fix a position of the movable member at one of a plurality of positions.
5. (Currently Amended) The HVAC controller according to claim 1, wherein one or more of the switches are mechanical switches.
6. (Currently Amended) The HVAC controller according to claim 1, wherein one or more of the switches are optical switches.

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7. (Currently Amended) The HVAC controller according to claim 1, wherein the two or more switches are positioned such that the first plurality of detents activate the two or more switches out of phase relative to one another.

8. (Currently Amended) The HVAC controller according to claim 1, wherein the two or more switches are positioned such that the first plurality of detents activate the switches 90 degrees out of phase relative to one another.

9. (Currently Amended) The HVAC controller according to claim 1, wherein the two or more switches are positioned such that the first plurality of detents activate the switches in one of four or more possible switch combinations.

10. (Currently Amended) The An HVAC controller[[,]] of claim 1 wherein the first plurality of detents have a first detent pattern, the HVAC controller further comprising:

a first plurality of detents having a first detent pattern;

a second plurality of detents having a second detent pattern;

a member adapted to move relative to the first and second plurality of detents;

a first detent engagement member fixed relative to the member and adapted to slide along the first plurality of detents to selectively fix the position of the member at one of a plurality of positions; and

a first second detent engagement member fixed relative to the member and adapted to effect one or more sensing means that control one or more parameter settings based on the position of the second first detent engagement member relative to the second first plurality of detents; and

a second detent engagement member fixed relative to the member and adapted to slide along the second plurality of detents to selectively fix the position of the member at one of a plurality of positions.

11. (Currently Amended) The HVAC controller according to claim 10, wherein the sensing means include two or more switches.

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12. (Original) The HVAC controller according to claim 10, wherein the second detent engagement member includes a plurality of second detent engagement members.

13. (Original) The HVAC controller according to claim 10, wherein the first detent engagement member includes a plurality of first detent engagement members.

14. (Original) The HVAC controller according to claim 10, wherein the first detent pattern is different than the second detent pattern.

15. (Currently Amended) The HVAC controller of claim 1 wherein the two or more switches include, comprising: a circuit board having a first detent switch and a second detent switch[;], the HVAC controller further comprising:

a first detent tab adjacent the first detent switch and a second detent tab adjacent the second detent switch; and

a first detent ring having the first [[a]] plurality of detents, the first detent ring extending in rotational engagement with the first detent tab and the second detent tab;

wherein, rotational movement of the first detent ring relative to the first and second detent tabs, is adapted to selectively deflect the first detent tab to activate the first detent switch and to selectively deflect the second detent tab to activate the second detent switch.

16. (Original) The HVAC controller according to claim 15, further comprising a second detent ring extending in rotational engagement with a detent engagement member and adjacent the first detent ring, the second detent ring selectively fixing the position of the first detent ring at one of a plurality of positions.

17. (Original) The HVAC controller according to claim 16, wherein the first detent ring has a first detent pattern, the second detent ring has a second detent pattern, wherein the first detent pattern is different than the second detent pattern.

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18-66. (Cancel)

67. (New) The HVAC controller of claim 1 further comprising:

a display; and

a controller, wherein the controller receives signals from the two or more switches, and is adapted to initially display a first HVAC parameter on the display, and once the movable member is moved, to display a second HVAC parameter on the display.

68. (New) The HVAC controller of claim 67 wherein the controller is adapted to adjust the displayed second HVAC parameter when the movable member is further moved.

69. (New) The HVAC controller of claim 68 wherein the movable member is moved rotationally, and wherein the second HVAC parameter value is increased when the movable member is rotated in a first direction, and is decreased when the movable member is rotated in a second direction.

70. (New) The HVAC controller of claim 69 wherein the movable member is a rotatable interface member having a plurality of detents.

71. (New) A method for causing two or more switches to be switched in a sequence, the method comprising:

providing two or more switches;

providing a movable member;

providing a plurality of detents, wherein the plurality of detents are configured to engage the two or more switches in a predetermined sequence when the movable member is moved; and

moving the movable member to cause the two or more switches to be switched in the predetermined sequence.

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72. (New) The method of claim 71 wherein the moving step includes rotating the movable member.

73. (New) The method of claim 71 wherein the moving step includes sliding the movable member.

74. (New) The method of claim 71 further comprising:
providing a display;
displaying a first parameter on the display; and
displaying a second parameter on the display after the movable member is moved.

75. (New) The method of claim 74 further comprising:
adjusting the second parameter on the display after the movable member is further moved.

76. (New) The method of claim 71 further comprising:
providing a display;
displaying a first parameter on the display; and
adjusting the first parameter on the display after the movable member is moved.